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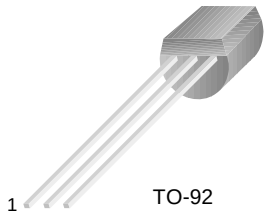
FAIRCHILD
SEMICONDUCTOR®

Jameco Part Number 178731

KSP2907A

General Purpose Transistor

- Collector-Emitter Voltage: V_{CEO}= 60V
- Collector Power Dissipation: P_C (max)=625mW
- Refer to KSP2907 for graphs



TO-92

1. Emitter 2. Base 3. Collector

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-600	mA
P_C	Collector Power Dissipation	625	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 ~ 150	°C

Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	I_C= -10μA, I_E=0	-60			V
BV_{CEO}	* Collector Emitter Breakdown Voltage	I_C= -10mA, I_B=0	-60			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E= -10μA, I_C=0	-5			V
I_{CBO}	Collector Cut-off Current	V_{CB}= -50V, I_E=0			-10	nA
h_{FE}	DC Current Gain	I_C= -0.1mA, V_{CE}= -10V V_{CE}= -10V, I_C= -1mA, V_{CE}= -10V , I_C= -10mA V_{CE}= -10V, *I_C= -150mA V_{CE}= -10V, *I_C= -500mA	75 100 100 100 50		 300	
V_{CE} (sat)	* Collector-Emitter Saturation Voltage	I_C= -150mA, I_B= -15mA I_C= -500mA, I_B= -50mA			-0.4 -1.6	V V
V_{CE} (sat)	Base Emitter Saturation Voltage	I_C= -150mA, I_B= -15mA I_C= -500mA, I_B= -50mA			-1.3 -2.6	V V
C_{ob}	Output Capacitance	V_{CB}= -10V, I_E=0 f=1MHz			8	pF
f_T	* Current Gain Bandwidth Product	I_C= -50mA, V_{CE}= -20V f=100MHz	200			MHz
t_{ON}	Turn On Time	V_{CC}= -30V, I_C= -150mA I_{B1}= -15mA			45	ns
t_{OFF}	Turn Off Time	V_{CC}= -6V, I_C= -150mA I_{B1}=I_{B2}= -15mA			100	ns

* Pulse Test: Pulse Width≤300μs, Duty Cycle≤2%
* Also available as and PN2907

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Typical Characteristics

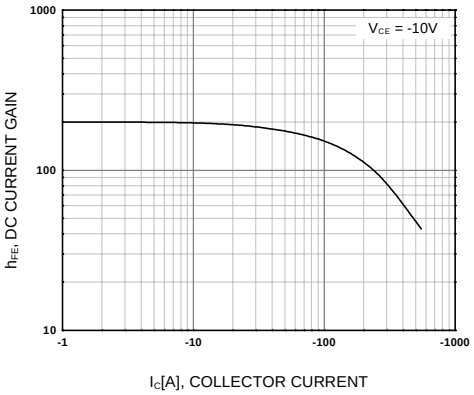

Figure 1. DC current Gain

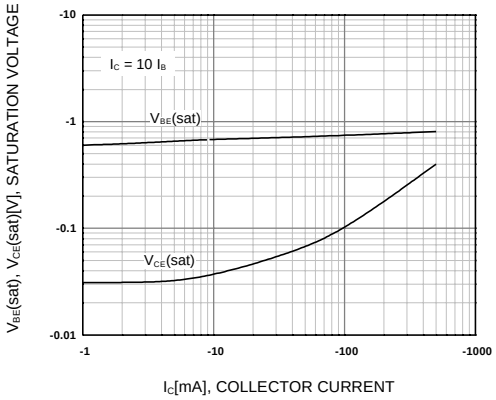

Figure 2. Collector-Emitter Saturation Voltage Base-Emitter Saturation Voltage

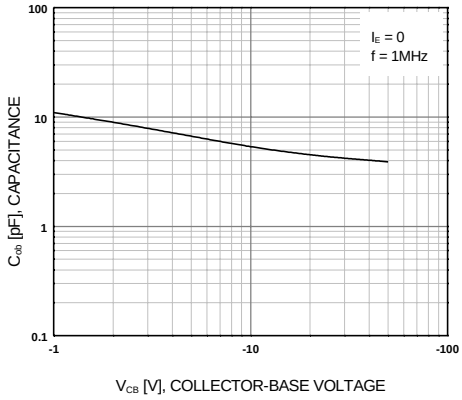

Figure 3. Output Capacitance

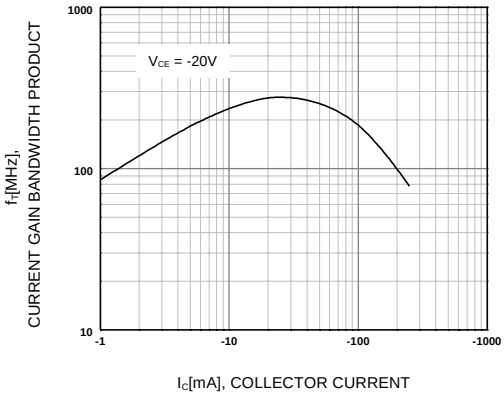

Figure 4. Current Gain Bandwidth Product

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Package Demensions

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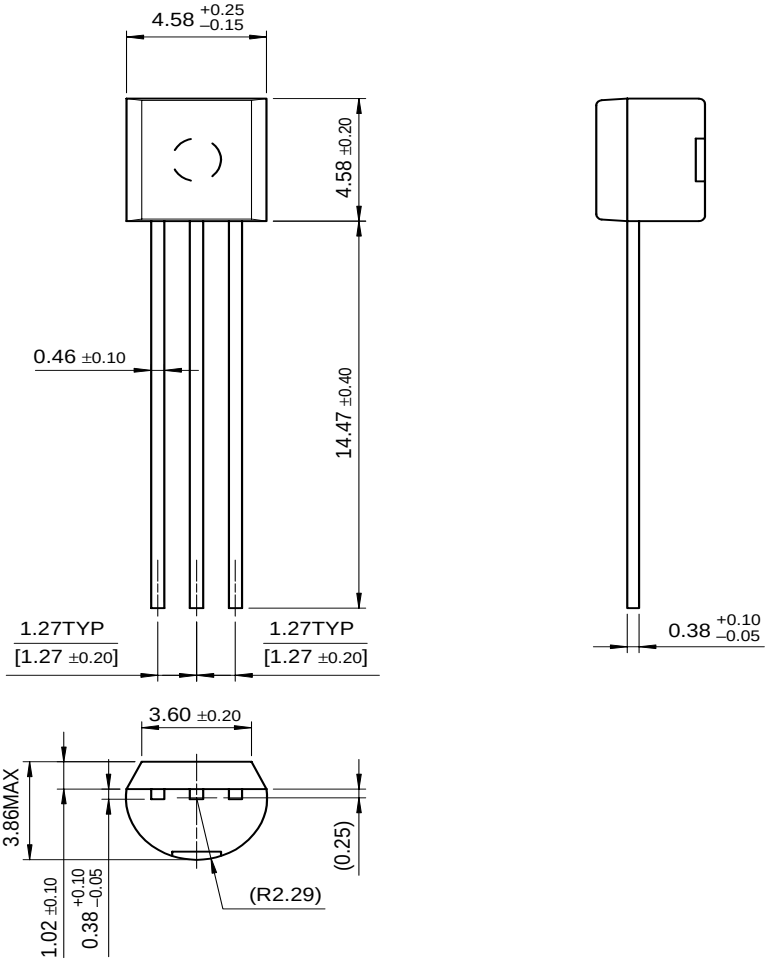

Dimensions in Millimeters

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